

Current Landscaping Code: Landscape and Bufferyard Standards

Where are these standards located?

Chapter 10-06 – Landscape and Bufferyard Standards

When Landscaping is Required:

- New land uses, developments, buildings and structures.
- Additions to such uses of 25% or more in terms of dwelling units, gross floor area, building perimeter, etc. – either single addition or cumulative additions.
- Change of use requiring increase in required parking of 25% or more.
- Single-family residential is exempt.

Required Landscape Areas:

- On Lot –
 - Requires minimum number of plant units per lineal foot of building perimeter, lot or dwelling unit, and is determined by zone.
 - Plant units must be installed within 50' of building.
- Parking Lot –
 - Required landscaping based on number of spaces, with threshold of 6 spaces.
 - Requires 27 sq. ft. of landscaped area per space, and one plant unit for every 324 sq. ft. of area.
 - Landscaping must be located within parking area in fingers, islands, etc.
- Peripheral Bufferyard –
 - Requires certain opacity of landscaping, determined by the zoning district of adjoining property, e.g. A commercial (CE) development abutting property zoned LI requires a 0.3 opacity value.
 - Applicants may then choose from different buffer alternatives, which have a range of bufferyard widths and corresponding required plant units (to be planted per 100 lineal feet of lot line boundary).
 - A solid fence or wall is considered 100% opaque.
- Street Bufferyard –
 - Requires certain opacity of landscaping, determined by zoning district of the property and street type along the property frontage.
 - Applicants may choose buffer alternative as with peripheral bufferyards.

Plant Unit Alternatives:

- Three interchangeable plant unit alternatives, consisting of different quantities and combinations of trees and shrubs.
- Trees and shrubs have required minimum sizes.
- Specific plant types may be selected from approved plant list.
- All bufferyard areas shall be seeded with lawn or native groundcover unless such vegetation is already established, or a ground cover shall be provided to prevent soil erosion and discourage weed growth.

Tree Preservation and Protection:

- No trees 6" DBH or larger may be removed from a site without:
 - A site development plan approved by the City.
 - Issuance of a building permit when required.
 - Permitted Exceptions –
 - § Thinning of trees recommended through approved forest stewardship plan.
 - § Installation of roads, drainage or utilities.
 - § Trees on lots in single-family subdivisions in "E" districts.
- Trees within 50' of land disturbance must be protected by 6' fencing, installed along outer edge of drip line.
- When existing trees are retained, a tree protection plan is required.

Other Requirements:

- Permanent irrigation plan required.
- Landscaping location cannot interfere with site visibility at intersections, utility lines, parking, etc.
- Credit for preservation of existing plant materials (trees 4" DBH or 10' in height).

New Landscaping Code: Landscaping and Screening Standards

Where are these standards located?

Division 10-50.40 – Landscaping and Screening Standards

Purpose and Benefits

The new code provides an overview of the purpose and benefits of sustainable landscaping, including an introduction to Xeriscape principles and Low Impact Development.

- Sustainability: New code establishes regulations for the installation and maintenance of landscaping and screening according to the following two principles:
 - Xeriscape Landscaping: Incorporates water-conserving designs, efficient irrigation, drought tolerant vegetation and promotes sustainable landscaping. Xeriscape principles apply to all required landscape areas.
 - Low Impact Development (LID): Landscape areas shall be designed in conformance with “Low Impact Development Amendments to the City of Flagstaff Stormwater Management Design Manual”.

When Landscaping is Required:

- All new nonresidential and residential developments.
- Additions to such uses of 25% or more in terms of dwelling units, gross floor area, building perimeter, etc. – either single addition or cumulative additions.
- Change or intensification of use requiring increase in required parking of 25% or more. If less than 25%, landscaping is only required for the new parking spaces.
- Single-family residential, cluster option and ADU's are exempt.

Landscaping Plans:

This section provides submittal guidelines for preliminary and final landscaping plans, and details of the required information to be contained within landscaping plans. An overview of the review and approval process for landscaping plans is also provided.

Required Landscape Areas:

- Residential Zone Buffers –
 - Apply to all non-transect residential zones and the T3 zone.
 - Includes setbacks, utility easements and drainage areas
- Non-Residential Zone Buffers – (2 types: Street and Peripheral)

- Street buffers requiring a minimum 10' wide landscape buffer along the street frontage.
- Peripheral buffers along the outer perimeter of a lot, with buffer width and/or fence requirement determined by zone and land use intensity. Required peripheral buffers range from five to ten feet in width, with some including the option of a six foot fence or wall.
- Parking Areas –
 - Required landscaping based on number of spaces, with threshold of 13 spaces.
 - Requires 27 sq. ft. of landscaped area per space.
 - Landscaping to be a combination of ground cover, shrubs and trees.
 - All rows of parking spaces shall have a terminal island, as well as a landscape island for every seven spaces.
 - Interior parking area landscaping shall be located in terminal islands, landscape islands, planter areas, etc.
 - Screening of perimeter of parking area shall be a minimum of 3' in height and consist of a fence or wall, shrubs or a combination of the two. May also be provided through preservation of existing vegetation.
- Other Landscape Areas –
 - Unused Areas: Areas not intended for a specific use are to be landscaped, unless retained in its natural state.
 - Landscaping around Buildings: Landscaping areas around buildings shall be maintained.

Landscaping Standards:

- Plant materials to be selected from approved plant list, with consideration for site characteristics and constraints. (Geology, topography, water demand, screening, protection/preservation of native species, fire prevention, etc.)
- All landscape areas shall be designed in compliance with Low Impact Development (LID) standards.
- Trees – One canopy tree required for every 33 linear feet of buffer, on average.
- Street Trees – To be consistent with surrounding landscaping and those in R-O-W in compliance with Engineering Standards.

- Groundcover, Shrubs and Mulch - 50% or more of landscape area to be covered with shrubs or vegetative ground cover. Current code is based on plant units, as well as the requirement that all bufferyard areas be seeded with lawn or native groundcover.
 - An average of one shrub required for every six feet along street and peripheral buffers.
 - Groundcover, shrubs or other types of plants shall be predominantly drought tolerant.
 - Organic mulch to be encouraged rather than use of rock.
- Oasis Allowance – An area of non-drought tolerant landscaping is permitted, and determined as a percentage of total site area.
 - If used, location should be on-site near the main building, assembly/recreation areas or areas of low evaporation potential.

Water Use and Irrigation:

- Hydrozones – Three zones based upon xeriscape landscaping principles.
 - Hydrozone 1 – Oasis zone, permitted but not required or encouraged. No restrictions on plants selected.
 - Hydrozone 2 – Transition zone between hydrozones 1 and 3. Plant selection from plant list, with lower water requirements.
 - Hydrozone 3 - Plant selection from approved plant list, with lowest water requirements. Includes native vegetation preserved on site.
- Irrigation -
 - Permanent irrigation plan required, with irrigation demands to be minimized through drought tolerant plant selection.
 - Greywater, reclaimed water or harvested rainwater shall be used to minimize use of potable water whenever possible.
 - Sites adjacent to reclaim lines required to connect for irrigation for appropriate areas.
 - In commercial and institutional zones, recreation fields and golf courses shall only use reclaim water.
- Storm Water Runoff and Water Harvesting -
 - Low Impact Development (LID) practices required for first inch of runoff.
 - Rain water harvesting to be integrated with development plans for irrigation purposes.

Maintenance

- Maintenance of all landscaping areas, including those in the R-O-W, is required.

- Includes watering, pruning, mowing, weed removal, removal and replacement of dead plants and removal of litter.
- Use of pesticides is regulated.

Fencing and Screening

- Fencing required to screen utility boxes.
- Chain link fence not permitted in residential zones or CB zone.
- New code includes reference to “Wildlife Compatible Fencing” and horse fencing.

Other Requirements

- Landscape plan required, including irrigation design, method of tree protection/preservation, plant types/locations, etc.
- Landscaping location cannot interfere with site visibility at intersections, utility lines, parking, etc.

Summary of Main Differences between Existing and New Code:

1. The new landscaping division includes greatly expanded purpose statements for landscaping and includes a new comprehensive section to address the benefits of landscaping.
2. Will no longer use opacity values to determine landscaping requirements. Instead, a certain width of buffer will be required, with a certain number or percentage of trees and shrubs to be required every XX feet.
3. Will no longer use “plant units” of existing code, but will allow developer to choose individual trees, shrubs and groundcover from an approved landscape plant list.
4. Threshold for parking lot landscaping requirement increased from 6 spaces in existing code to 13 spaces in new code.
5. New code encourages and requires sustainable practices to be integrated into landscape plans, including LID, storm water harvesting and use of reclaim water.
6. New code incorporates idea of “Hydrozones” and xeriscape principles as techniques for developing sustainable landscape designs.
7. Selection of plant materials in new code to be more closely matched to the specific characteristics and constraints of the development site.
8. On lot landscaping of existing code will be implemented through oasis and hydrozone approach in new code.

Comparison of Landscaping Code Sections			
Existing LDC		New Zoning Code	
10-06-001	Purpose	10-50.40.010	Purpose and Benefits
10-06-002	Landscaping Standards	10-50.40.020	Applicability
10-06-003	Bufferyard Performance Standards	10-50.40.030	Definitions
10-06-004	Landscaping for Parking Areas and Lots	10-50.40.040	Landscaping Plans
10-06-005	Tree Preservation and Protection	10-50.40.050	Landscape Location Requirements
		10-50.40.060	Landscaping Standards
		10-50.40.070	Water Use and Irrigation
		10-50.40.080	Maintenance
		10-50.40.090	Fencing and Screening